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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,178	11/27/2001	Michael D. Bergmann	P-M B-01	5423
28784	7590	11/16/2006	EXAMINER	
O'CONNOR & O'CONNOR 4701 HOMESTEAD LITTLETON, CO 80123			DASS, HARISH T	
			ART UNIT	PAPER NUMBER
			3693	

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/995,178	Applicant(s) BERGMANN ET AL.	
	Examiner Harish T. Dass	Art Unit 3693	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) 3-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 3-5 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/21/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-2 are drawn to a system for optimizing a portfolio of financial investments, classified in class 705, subclass .
- II. Claim 3 is drawn to a method of creating a derived asset class using the characteristics of one or more predefined asset class, classified in class 705, subclass .
- III. Claims 4-5 are drawn to creating a derived asset class using linear constraints and statistics.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because I is directed to risk management optimization, and invention II is directed to computer performing metadata mapping. The subcombination has separate utility such as integrating data.

Inventions I and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does

not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because I is directed to risk management optimization, and invention II is directed to computer performing metadata mapping. The subcombination has separate utility such as integrating data.

Inventions II and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because I is directed to risk management optimization, and invention II is directed to computer performing metadata mapping. The subcombination has separate utility such as integrating data.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

During a telephone conversation with Attorney Gregory O'Conner (Phone: 303-373-6165) on October 12, 2006, and his confirmation message (on Examiner's

voicemail – 10/13/06, Dr. Bergmann agreement regarding provisional election) a provisional election was made without traverse to prosecute the invention of Group I (claims 1-2). Affirmation of this election must be made by applicant in replying to this Office action. Groups II and Group III (Claims 3-5) are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Particularly, claim 1 recites limitation "its tax basis multiplied by the expected effective tax rate upon liquidation" which is not clear how the contingent claim is calculated, i.e. what formula and tax base is used.

Claims 1-2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 and claim 2, recite the limitation "the contingent tax" (line 8), "the market value" (line 9) and "the expected effective tax rate". There are insufficient antecedent basis for these limitation in the claims. Applicant should properly correct all claims (enablement and limitations) for antecedent bases errors.

Claims 1-2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The rejected claims do not recite any elements of the claimed product. Thus, they do not clearly set forth metes and bounds of the claimed product. Particularly, the claims recites "constraints", it is not clear what constraints are used (See specification paragraphs 48-49).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frank et al (hereinafter Frank – US 6,240,399) in view of Reichenstein "Calculating Asset Allocation", Fall 2000 (which is based on earlier work of the author, see endnotes page 5.)

Re. Claim 1, Frank discloses a. defining several accounts, each of which accounts have financial investments, each of which financial investment in the account being characterized in one or more asset classes, the financial investments in a particular

asset class having a tax characteristic in common with one another [Figures 1, 6-7; col. 1 lines 15-55; see entire document which is related to optimization of investment allocation and tax situation], b. determining the contingent tax on each asset class by calculating the difference between the market value of the asset class and its tax basis multiplied by the expected effective tax rate upon liquidation [See Figures 7-8; col. 10 lines 34-46 and appendix A], pre-tax and after-tax return [col. 5 line 46; claim 2], and constraints [col. 8 lines 40-42].

Reichenstein discloses c. determining pre-tax and after-tax constraints on what investments are to be contained in the portfolio as to asset classes [see 5 page document which is relevant to asset allocation of asset classes, particularly page pages 1-2 and Exhibit 1 and related passages], and d. transforming the pre-tax constraints and pre-tax investment characteristics into a set of after-tax constraints and investment characteristics, including after-tax expected returns and volatility estimates [pages 1-2, particularly see underlined area], and e. adjusting market values of financial assets in each portfolio to reflect the effect of the contingent tax on the assets [pages 1-2; Exhibit 1] to provide a new procedure for calculating asset allocation to improve upon the traditional approach and make a distinction between before-tax and after-tax dollars when calculating the asset allocation.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Frank and include determining pre-tax and after-tax constraints on what investments are to be contained in the portfolio as to

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asset classes, transforming the pre-tax constraints and pre-tax investment characteristics into a set of after-tax constraints and investment characteristics, including after-tax expected returns and volatility estimates and, and adjusting market values of financial assets in each portfolio to reflect the effect of the contingent tax on the assets, as disclosed by Reichenstein, to provide a new procedure for calculating asset allocation to improve upon the traditional approach and make a distinction between before-tax and after-tax dollars when calculating the asset allocation.

Re. Claim 2, Frank discloses calculating after-tax returns and pre-tax returns using corresponding pre-tax returns [col. 5 line 46; col. 4 lines 20-28; claim 2].

Reichenstein discloses wherein the step of transforming the pre-tax constraints and pre-tax investment characteristics into a set of after-tax constraints and investment characteristics [pages 1-2; Exhibit 1] to distinction between before-tax and after-tax dollars when calculating the asset allocation and considering tax issue when making reasonable adjustments. Calculating standard deviations is known. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosures of Frank and Reichenstein and include calculating pre-tax and after tax standard deviations to evaluate how close the data spreads are and as a result of this calculation make best allocation decision.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 CFR ' 1.111 (c) to consider the references fully when responding to this action.

Lynn Brenner "FAMILY FINANCE / Getting a Handle On Rules of Roth IRAs", Newsday. (Combined editions). Long Island, N.Y.: Apr 29, 2000. pg. F.04; ProQuest document ID: 53203695 discloses Roth IRA.

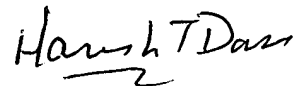
Jacob, Nancy "Tax-efficient investing: Reduce tax drag, improve asset growth", Trusts & Estates. Atlanta: Jun 1996.Vol.135, Iss. 7; pg. 25, 8 pgs, discloses current Administration proposals, if passed, would treat all shorts against-the box as constructive sales, taxing them currently. They will also require taxpayers to use average-cost basis for computing capital gains and losses with respect to any sale and first-in, first-out treatment for the holding period. These latter changes can significantly reduce the value of loss harvesting and offsetting gains and losses. It also makes it less desirable to add positions in securities where the fund already has other, lower basis holdings, because any new purchases will end up with a much lower tax basis than their market value. Depending on how tax regulations do in fact change, however, it is likely that the changes will be targeted primarily against transactions to avoid taxes associated with diversifying low-cost basis holdings, as opposed to restricting the value of ongoing, plain vanilla tax-management within diversified equity and bond portfolios.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harish T. Dass whose telephone number is 571-272-6793. The examiner can normally be reached on 8:00 AM to 4:50 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P. Trammell can be reached on 571-272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Harish T Dass
Examiner
Art Unit 3693



11/11/06